OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the Commission

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OPINION 302

Designation, under the Plenary Powers, of a type species, for the genus *Aulacostephanus* Tornquist, 1896 (Class Cephalopoda, Order Ammonoidea) in harmony with accustomed nomenclatorial usage



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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 302

A. The Officers of the Commission

Honorary Life President: Dr. Karl Jordan (British Museum (Natural History), Zoological Museum, Tring, Herts., England).

President: (Vacant).

Vice-President: Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil).

Secretary: Mr. Francis Hemming (London, England).

B. The Members of the Commission

(arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology).

Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (Vice-President) (1st January 1944).

Professor J. R. Dymond (University of Toronto, Toronto, Canada) (1st January 1944).

Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (28th March 1944).

Professor Harold E. Vokes (Johns Hopkins University, Baltimore, Maryland, U.S.A.) (23rd April 1944).

Dr. William Thomas Calman (Coulsdon, Surrey, England) (1st January 1947). Professor Béla Hankó (Békéscsaba, Hungary) (1st January 1947).

Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.) (1st January 1947).

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947).

Senor Dr. Angel Cabrera (Eva Peron, F.C.N.G.R., Argentina) (27th July 1948) Mr. Francis Hemming (London, England) (Secretary) (27th July 1948).

Dr. Joseph Pearson (Tasmanian Museum, Hobart, Tasmania, Australia) (27th July 1948).

Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th July 1948).

Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950).

Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950).

Mr. Norman Denbigh RILEY (British Museum (Natural History), London) (9th June 1950).

Professor Tadeusz Jaczewski (Department of Systematic Zoology, Warsaw University, Warsaw, Poland) (15th June 1950).

Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a. M., Germany) (5th July 1950).

Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950).

OPINION 302

DESIGNATION, UNDER THE PLENARY POWERS,
OF A TYPE SPECIES FOR THE GENUS
"AULACOSTEPHANUS" TORNQUIST,
1896 (CLASS CEPHALOPODA, ORDER
AMMONOIDEA) IN HARMONY
WITH ACCUSTOMED USAGE

RULING:—(1) Under the Plenary Powers all type selections for the genus *Aulacostephanus* Tornquist, 1896 (Class Cephalopoda, Order Ammonoidea) made prior to the present Ruling are hereby set aside, and the nominal species *Ammonites pseudomutabilis* de Loriol, 1874, is hereby designated to be the type species of the foregoing genus.

- (2) The under-mentioned generic name is hereby placed on the Official List of Generic Names in Zoology as Name No. 743: Aulacostephanus Tornquist, 1896 (gender: masculine) (type species, by designation, under the Plenary Powers, under (1) above: Ammonites pseudomutabilis de Loriol, 1874).
- (3) The under-mentioned specific names are hereby placed on the Official List of Specific Names in Zoology as Names Nos. 162 and 163 respectively:—(a) mutabilis Sowerby (J. de C.), 1823, as published in the combination Ammonites mutabilis; (b) pseudomutabilis de Loriol, 1874, as published in the combination Ammonites pseudomutabilis (specific name of type species, by designation, under the Plenary Powers under (1) above, of Aulacostephanus Tornquist, 1896).

I.—THE STATEMENT OF THE CASE

On 20th January 1949 Dr. W. J. Arkell (Sedgwick Museum, Cambridge University, Cambridge) submitted an application to the Commission for the designation, under the Plenary Powers, of a type species for the genus Aulacostephanus Tornquist, 1896 (Class Cephalopoda, Order Ammonoidea) in harmony with accustomed nomenclatorial usage. Minor revisions were made in this application in the course of 1950, and its terms were finally settled on 13th September 1950. The following application so submitted was as follows:—

Proposed use of the Plenary Powers to designate the type species of the genus "Aulacostephanus" Tornquist, 1896 (Class Cephalopoda, Order Ammonoidea) (Jurassic)

By W. J. ARKELL, M.A., D.Sc., F.R.S. (Sedgwick Museum, Cambridge University, Cambridge)

The case of the generic name Aulacostephanus was fully reviewed by me in 1935 (Geol. Mag. 72:252—253, 256), when I recommended that the Commission should stabilize usage by ruling that the type be Am. mutabilis d'Orbigny nec Sowerby, which the authors presumably had in mind and intended (= Am. pseudomutabilis de Loriol). No published dissent from this recommendation has come to my notice, nor has any been received privately; hence I now ask the International Commission on Zoological Nomenclature to use its Plenary Powers to stabilise current usage by giving effect to my recommendation of 1935.

The relevant facts are as follows:-

- (1) The name Aulacostephanus first appears on page 5 of Tornquist's memoir (1896), where he remarked that Olcostephanus berryeri, eumelus and pseudoeumelus are of interest on account of their relationship to "Aulacostephanus (Am. mutabilis)". On page 7 he explained that Pompeckj in a letter had informed him of von Sutner's and Pompeckj's intention to propose the name Aulacostephanus for "Reineckeia" mutabilis Sowerby and its allies. No other species is mentioned by name in either place. Hence on the strict interpretation of the Règles, the nominal species Ammonites mutabilis J. de C. Sowerby, 1823 (Min. Conch. 4: 145 pl. ccccv) is the type species of this genus.
- (2) Ammonites mutabilis J. de C. Sowerby, from the Glacial Drift, was obscurely figured by Sowerby and inadequately described. The holotype has since been refigured by me (1933: pl. xxxix, figs. 5, 5a)

and it does not belong to the group which, like *Reineckeia*, has a ventral smooth band. Had Sutner and Pompeckj consulted Sowerby's holotype, they would never have referred to this species as "*Reineckeia mutabilis*". It is, in fact, a species of the genus which Salfeld (1914) called *Rasenia*; Salfeld (1914: 129) in his important stratigraphical work assigned it to *Rasenia*, and it has ever since been known as a zonal index fossil under the name *Rasenia mutabilis*.

- (3) Sutner and Pompeckj and Tornquist, therefore, were interpreting Am. mutabilis by some other figure, and it is highly probable that this figure was that of d'Orbigny (1850:553, pl. ccxiv), which shows admirably one of the smooth-ventered forms with ribs interrupted over the siphuncle. The species so figured was later renamed Ammonites pseudomutabilis by de Loriol (1874:28, pl. v, figs. 1—3). The specimen figured by d'Orbigny was selected as the lectotype of this species by Durand (1932: 306).
- (4) Salfeld (1914, loc. cit.) when establishing his zonal classification of the Upper Jurassic placed Am. pseudomutabilis de Loriol, together with the allied Am. yo d'Orbigny and Am. eudoxus d'Orbigny, in the genus Aulacostephanus, without comment. These species and others have been called Aulacostephanus by authors ever since, and Salfeld's separate zones of Rasenia mutabilis and Aulacostephanus pseudomutabilis are in current use by all stratigraphers.
- (5) To reverse current usage by transferring the name Aulacostephanus to what has always been known as Rasenia, and to rename Aulacostephanus auct. would cause serious confusion, in stratigraphy as well as in palaeontology.
- (6) Two attempts have been made to fix the name Aulacostephanus on the Reineckeia-like genus for which it was certainly intended. Spath (1925: 152) wrote, without stating that he was selecting a type species, "Aulacostephanus (type: A. eudoxus d'Orbigny)". Schindewolf (1925: 339) selected A. phorcus Fontannes, but aded in a footnote that he had been forestalled by Spath who had selected A. eudoxus.
- (7) Since neither A. eudoxus nor A. phorcus was mentioned by the original author (Tornquist) in connexion with the generic name Aulacostephanus, neither is eligible for selection as the type species of the genus so named.
- (8) In order to stabilise the nomenclature of this group and to prevent the serious confusion, both in stratigraphy and palaeontology,

which would result from the strict application of the Règles in this case, the International Commission is asked:—

- (1) to use its Plenary Powers :-
 - (a) to set aside the indication by monotypy of *Ammonites mutabilis* Sowerby (J. de C.), 1823, as the type species of *Aulacostephanus* Tornquist, 1896;
 - (b) to designate Ammonites pseudomutabilis de Loriol, 1874, to be the type species of the foregoing genus;
- (2) to place the generic name Aulacostephanus Tornquist, 1896 (gender of generic name: masculine) (type species, by designation under the Plenary Powers under (1) (b) above: Ammonites pseudomutabilis de Loriol, 1874) on the Official List of Generic Names in Zoology;
- (3) to place the under-mentioned trivial names on the Official List of Specific Trivial Names in Zoology:—
 - (a) mutabilis Sowerby (J. de C.), 1823, as published in the binominal combination Ammonites mutabilis;
 - (b) pseudomutabilis de Loriol, 1874, as published in the binominal combination Ammonites pseudomutabilis.

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- SOWERBY, J. and J. de C., 1812—29, The Mineral Conchology of Great Britain, 7 vols. (London).
- SPATH, L. F., 1925, "Ammonites and Aptychi" in Wyllie and Smellie, "Collection of fossils and rocks from Somaliland", Mon. Hunterian Mus. Glasgow, 1: 111, pt. 7.
- TORNQUIST, A., 1896, "Die degenerierten Perisphinctiden des Kimmeridge von le Havre", Mém. Soc. pal. Suisse, 23:1.

II.—THE SUBSEQUENT HISTORY OF THE CASE

- **2.** Registration of the present application: On the receipt of Dr. Arkell's application in January 1949, the question of the species to be accepted as the type species of the genus *Aulacostephanus* Tornquist, 1896, was allotted the Registered Number Z.N.(S.)384.
- **3.** Publication of the present application: Following upon its receipt in September 1950, Dr. Arkell's revised application was sent to the printer in December 1950, and publication took place in Triple-Part 6/8 of volume 2 of the Bulletin of Zoological Nomenclature on 4th May 1951 (Arkell, 1951, Bull. zool. Nomencl. 2: 188—190).
- **4.** Issue of Public Notices: Under the revised arrangements approved by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, Bull. zool. Nomencl. **4**: 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 4th May 1951, both in Triple-Part 6/8 of volume 2 of the Bulletin of Zoological Nomenclature, the Part in which Dr. Arkell's application was published, and also to the other prescribed serial publications. In addition, Notice was given to certain palaeontological serial publications in Europe and America. The publication of these Notices elicited the comment from the Joint Committee on Zoological Nomenclature for Paleontology in America reproduced in the immediately following paragraph.

5. Communication received from the Joint Committee on Zoological Nomenclature for Paleontology in America: On 9th April 1952 there was received a large number of letters commenting upon various applications previously published in the Bulletin of Zoological Nomenclature, including a letter stating that the members of the Joint Committee on Zoological Nomenclature were equally divided in regard to the present application, from Professor G. Winston Sinclair (then of the University of Michigan, Ann Arbor, Michigan, U.S.A.), the Chairman of the Joint Committee. The letter in question was dated 6th February 1952, and its late receipt was apparently due to a decision to defer the despatch to the Commission of the letters containing comments by the members of the Joint Committee until all the letters in question had been prepared. By the date on which this letter was received, the Prescribed Period of Public Notice had expired and the Voting Paper (V.P.(52)20) relating to the present case had been prepared. It was therefore impossible to include in that Voting Paper a reference to Professor Sinclair's letter, but, when a few days later the Voting Paper was despatched (15th April), a supplementary sheet containing the particulars furnished by Professor Sinclair was issued to the Members of the Commission, who were thus placed in possession of the views of the members of the Joint Committee at the same time that they received the Voting Paper relating to the present case. The following is the text of Professor Sinclair's letter :-

The Joint Committee on Zoological Nomenclature for Paleontology in America has considered this subject, and I wish to inform you that, being polled, they voted: To support the petition (five):—(1) Katherine V. W. Palmer; (2) Bobb Schaeffer; (3) Bryan Patterson; (4) J. Marvin Weller; (5) John B. Reeside, Jr. To oppose the petition (five):—(1) Don L. Frizzell; (2) A. Myra Keen; (3) Siemon W. Muller; (4) G. Winston Sinclair; (5) John W. Wells.

III.—THE DECISION OF THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

6. Issue of Voting Paper V.P.(52)20: On 15th April 1952, a Voting Paper (V.P.(52)20) was issued in which the Members of

the Commission were invited to vote either for, or against, the proposal "relating to *Aulacostephanus* Tornquist, 1896, as specified in Points (1) to (3) at the foot of page 189 of volume 2 of the *Bulletin of Zoological Nomenclature*" [i.e. in the last paragraph of the application reproduced in paragraph 1 of the present *Opinion*].

- 7. The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the prescribed Voting Period closed on 15th July 1952.
- **8.** Particulars of the Voting on Voting Paper V.P.(52)20: The state of the voting on Voting Paper V.P.(52)20 at the close of the prescribed Voting Period was as follows:—
 - (a) Affirmative Votes had been given by the following sixteen (16) Commissioners (arranged in the order in which Votes were received):

Hering; Calman; Dymond; Esaki; Pearson; do Amaral; Hankó; Bonnet; Lemche; Vokes; Mertens¹; Cabrera; Bradley; Boschma; Hemming; Riley;

(b) A Negative Vote had been given by one (1) Commissioner:

Stoll;

(c) Voting Paper V.P.(52)20 was not returned by one (1) Commissioner:

Jaczewski.

9. Declaration of Result of Vote: On 16th July 1952, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.

¹ Commissioner Mertens exercised in this case the right conferred by the Thirteenth International Congress of Zoology in Paris, 1948, under which a Commissioner may, if he so desires, signify his willingness to support the view, or the majority view, of other members of the Commission (1950, Bull. zool. Nomencl. 4:50—51).

(52)20, signed a Certificate that the Votes cast were as set out in paragraph 8 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

- 10. On 17th March 1954 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(52)20.
- 11. The following are the original references for the names which appear in the Ruling given in the present *Opinion*:—

Aulacostephanus Tornquist, 1896, Abh. schweiz. pal. Ges. 23:5,7 mutabilis, Ammonites, Sowerby (J. de C.), 1823, Min. Conch. 4: 145, pl. ccccv

pseudomutabilis, Ammonites, de Loriol, 1874, Mém. Soc. Phys. Hist. nat. Genève 23: 28, pl. 5, figs. 1—3

- 12. At the time of the adoption of the Ruling given in the present *Opinion*, the expression prescribed for the second portion of the binomen which constitutes the scientific name of a species was the expression "trivial name" and the *Official List* reserved for recording such names was styled the *Official List of Specific Trivial Names in Zoology* the word "trivial" appearing also in the title of the *Official Index* reserved for recording rejected and invalid names of this category. Under a decision taken by the Fourteenth International Congress of Zoology, Copenhagen, 1953, the expression "specific name" was substituted for the expression "trivial name" and corresponding changes were made in the titles of the *Official List* and *Official Index* of such names (1953, *Copenhagen Decisions zool. Nomencl.*: 21). The changes in terminology so adopted have been incorporated in the Ruling given in the present *Opinion*.
- 13. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in

dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

14. The present *Opinion* shall be known as *Opinion* Three Hundred and Two (302) of the International Commission on Zoological Nomenclature.

DONE in London, this Seventeenth day of March, Nineteen Hundred and Fifty-Four.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING